



December 7, 2020

To: Biden-Harris Education Agency Review Team
From: SoLD Alliance Governing Partners
Subject: Federal Education Policy Recommendations from the SoLD Alliance

As President-Elect Biden and Vice President-Elect Harris prepare to take office, our nation faces unprecedented challenges caused by overlapping crises, including the ongoing COVID pandemic, longstanding racial injustices, and worsening economic conditions. As President-Elect Biden has said, our goal must be not only to respond to these crises but to transform our outdated systems and position our nation to “build back better.” And we must do so in a manner that both significantly addresses longstanding, systemic racial, socioeconomic, and other inequities and unites rather than divides us as Americans. This is particularly true in the education context, including our public schools and the broader ecosystem that supports young people’s learning and development.

We are writing this memo as governing partners of the [Science of Learning and Development \(SoLD\) Alliance](#) to offer **two overarching recommendations** for the Biden Administration regarding key actions to both address current crises and transform our education systems to dramatically improve equity and outcomes:

- 1. Seize this moment to work with the field to help set a new national vision and agenda for education, and use the science of learning and development to help define that agenda and center it on equity.** Our national education agenda is at a once-in-a-generation inflection point. The current crises we face have both created immediate needs and further illustrated the fundamental insufficiencies and inequities in our current systems. In recent years, there has been a leap and convergence in research from multiple disciplines regarding what we know about how young people learn and develop. This science provides extraordinary, actionable insights regarding the incredible potential in every young person and what we can and must do both to respond to current crises and to transform systems such that every child, and particularly those most marginalized, has the opportunity to thrive. *We urge you to use the bully pulpit and convening authority to engage key leaders, communities, and stakeholders from across the political spectrum to help define and advance a new education narrative and agenda – one that puts children at the center and transforms and aligns our education and other youth-serving systems around them, from birth through adolescence. Just as you are rightly embracing science in response to the COVID pandemic and other policy areas, we urge you to use and grow this knowledge to help chart a course that can dramatically improve equity and outcomes in education.*
- 2. Take a range of early policy actions that can both respond to current crises and serve as high-leverage downpayments toward a new national agenda to build education systems that are aligned with the science and designed for equity.** The science of learning and development calls for long-term changes in multiple aspects of our education systems, but there are many steps the

Biden Administration can take early – including things to help the field start doing and stop doing – that are both consistent with the science and ripe for federal action. These include immediate actions to address the COVID pandemic and its inequitable impact; early administrative actions to advance racial equity and empower leadership in the field; and new legislative proposals and investments to signal key shifts and support state and local leaders in transforming outdated education systems. *We urge you to consider a number of early policy actions, which are itemized below.*

This memo is focused on the US Department of Education (ED) transition team and its areas of authority, but please note that our science findings are relevant to learning and development in all settings; they have implications for federal programs across agencies; and they call for greater alignment and integration of those programs (as discussed below).

The SoLD Alliance is ready to serve as a resource for the transition team and the new Administration in using the science to inform your education vision and priorities, as well as our shared national education agenda. The SoLD Alliance is a growing network of leaders from across the education ecosystem – and across the ideological spectrum – who are working to elevate key research on learning and development and what it means for education practice and policy. You can find more information on us, the science of learning and development, its implications for education and youth development, and the work of our Allies at www.soldalliance.org.

1. Seize this moment for Presidential leadership to help establish a new vision and agenda for education, and to elevate the science of learning and development as a key driver of change.

Education has long been central to the promise of America. But our current education systems have never been designed to promote the equitable opportunities or outcomes that our children and families deserve, and that our democracy, society, and economy need. For more than 25 years, our national education agenda has centered on standards-based reform. This agenda has put some essential foundations in place, particularly for equity, and has led to modest progress in outcomes. But it is (and always has been) only one piece of the puzzle and has had unintended negative consequences as well. Today, there is a need and opportunity to define a new education agenda – one that builds upon and goes beyond the current reform frame; leverages new research, data, and evidence, including from the science of learning and development; centers equity, justice, and those closest to the challenges; puts children and youth in the center and transforms and integrates our public systems to best serve them; is more unifying across the political spectrum; and is more impactful in terms of opportunity and outcomes. Finally, the overlapping crises we face regarding the COVID pandemic, racial injustice, and economic recession create both great need and forcing events for action – in terms of our education systems and the broader ecosystem that supports learning and development.

President-Elect Biden and other Administration leaders have a unique opportunity to help frame a next-generation agenda. Despite the limited federal role in education, history clearly illustrates that presidential transitions and leadership can play an outsized role in defining and advancing our national education agenda. There is also widespread public support for a new vision for education focused on developing the whole child and ensuring all young people can thrive. We urge you to work with the field – particularly elevating the voices of students and communities that have been most marginalized – through consistent use of the bully pulpit, ongoing outreach and engagement, regular convenings, and more to help define and advance a new narrative and agenda for the generation ahead.

The science of learning and development can help define that vision and agenda.

The science of learning and development offers a series of [integrated findings](#)¹ regarding how children learn and develop and what we can and must do to help all young people thrive. These findings are greatly significant for the education of all children, and they are particularly drivers of equity in that they dispel false myths and biases that have long held us back and illuminate approaches to have the greatest positive impact on young people who are most marginalized and least served by our current systems. Together, these findings call for a transformation in our education and other family- and youth-serving systems. For example:

- *The science affirms* that every young person has incredible **potential** –billions of neurological pathways to success – including both the ability to master an array of critical knowledge and skills *and* numerous areas of specific talent and interest in which they can excel. There is no “bell curve” on potential. Further, the science proves that every young person’s brain is highly **malleable** and resilient throughout their lives – particularly in early childhood and adolescence, but also at every point in between. Our brains literally rewire based on new learning and experiences. This includes remarkable ability, with the right conditions and supports, to overcome the impacts of adversity. It is never too late to thrive, though starting early also matters.
- *The science establishes* that **context** – the **environments, experiences, cultures, and (particularly) relationships** that young people experience – is far and away the most significant variable that determines each person’s trajectory in learning and life. Fewer than 10% of our genes will be expressed in our lifetime, and it is context that most significantly determines which genes will be expressed and how. Adversity, both individual and collective, can have profound effects on children and youth. But we can and must design learning environments and create conditions and supports that build strong relationships, overcome the effects of adversity, and maximize each child’s developmental range to help each and every young person thrive, including in response to current crises.
- *The science shows* that each young person is **unique and individual** based on their singular lived experience and genetic expression. While each young person learns and develops on a **continuum**, building on what came before, the brain is a complex web, and the learning journey is jagged and nonlinear – more like moving up a climbing wall than a ladder. There is no such thing as an average or “normal” learner. Every child learns differently, and all learning is variable. We must and can build more personalized systems, both in and out of school, that are designed to better meet each and every child’s individual needs, interests, talents, and pathways, and not expect all children to bend to our fixed education systems.
- *The science shows* that learning and development are deeply **integrated** in terms of social, emotional, cognitive, and academic development. These are not separate or in conflict but rather are mutually reinforcing. It is this kind of integrated learning that builds new, increasingly complex neural connections in the brain and demands that education be both a learning and development enterprise by design. The science explains how people learn by continuously **making meaning** – connecting new information and experiences to their prior knowledge, cultures, and contexts. This is how new, deeper understandings and ideas are born, particularly in adolescence, when young people’s identities are ripening. We can and must build rich learning environments and approaches that maximize each child’s learning and development in this regard.

¹Pamela Cantor, M.D., Linda Darling-Hammond, Bethany Little, David Osher, Scott Palmer, Karen Pittman & Todd Rose (2020) *How the Science of Learning and Development Can Transform Education*.

These findings have profound implications for educator practice and for how we must design schools and all learning environments to put children and youth at the center and create the conditions in which all young people, and particularly those most marginalized, can thrive. (See Figure 1 below, and for more information, see for example, [Implications for educational practice of the science of learning and development](#)².)

2. Take early policy actions that are aligned with the science and designed for equity to help address current crises and “build back better.”

Taken together, these science findings, and their implications for teaching practice and design of learning environments, call for fundamental shifts in education *policy* as well to transform our education systems and build a broader, connected ecosystem to best serve all children and youth, and particularly students living in poverty, students of color, students with disabilities, students who are learning English, and other youth who are marginalized — who together comprise the vast majority of our public school students, and our nation’s future.

Building education systems aligned with the science will require a new long-term vision and agenda with new, broader pillars and a more comprehensive theory of action — significantly expanding and improving on current standards-based reforms. President-Elect Biden and his Administration can play a key role — working with the field — to help define and advance this new agenda for the next generation.

There are many ways to present these big shifts or pillars of a broader education agenda, and they are overlapping and integrated. For example:

- **We must focus on developing the whole child across the whole age range.** We know that children and youth can only achieve their great potential if they are nurtured and supported socially, emotionally, academically, cognitively, physically, in terms of identity, and more. We must redesign our education and youth-serving systems to meet the full needs, interests, and abilities of every young person, including in the broader education goals we must set, the comprehensive systems of support we must provide (from nutrition to health to mental health), and the broad, rich, culturally inclusive curriculum and learning experiences we must advance. This includes a particular focus on early childhood and adolescence.
- **We must improve and align the learning and development “ecosystem” to best serve every young person.** Learning and development happens everywhere, and there are many systems and sectors that must work together to best serve every young person efficiently and effectively throughout their learning and developmental journey. There is also much to be learned across



Figure : Key Foundations for Design of Learning Environments that are Aligned with Science and Designed for Equity

² Linda Darling-Hammond, Lisa Flook, Channa Cook-Harvey, Brigid Barron & David Osher (2020) *Implications for educational practice of the science of learning and development*, Applied Developmental Science, 24:2, 97-140, DOI: 10.1080/10888691.2018.1537791

systems to improve one another. We need to better integrate the array of governmental and nongovernmental players and services to more efficiently and effectively meet young people's needs, interests, and talents. This has implications for everything from out of school learning and youth development to integration of social services to parent and family engagement to transitions between early childhood, K-12, and higher education.

- **We must establish equitable learning environments.** This requires eliminating systemic resource inequities in education and providing the funding necessary to help every child succeed – targeting extra resources to support students who have additional needs or are in under-resourced communities. But this also means building learning environments and conditions in schools and other settings that are designed for safety, belonging, relationships, identity affirmation, and cultural competency so that all children and youth see themselves as highly valued and capable of success.
- **We must personalize our education systems and approaches.** Every child is unique in their knowledge, identity, experiences, cultures, and learning journeys. Yet our current education systems are centered largely on age-based cohorts and designed for a mythological average or “normal” learner, with little focus on individual student variation or agency. We must personalize our education systems to best meet the individual needs, interests, talents, and pathways of each and every child. This includes, for example, greater use of diagnostic assessments and learning plans, different teaching and staffing models, greater attention to student voice and agency, and moving toward more student-centered funding and mastery-based approaches.
- **We must build and support new, continually improving adult capacity and well-being.** Much of this agenda will depend on new knowledge, roles, staffing models, and supports for teachers, principals, counselors, and other adults both inside and outside of schools. To support all children to learn and thrive, the adults in the system must also be given what they need to learn and thrive. This will require shifts in policy across the continuum of educator preparation, licensure and certification, placement, systems of ongoing professional learning and support, career pathways, and more. And it will require efforts to diversify the teaching profession to better reflect and serve our increasingly diverse student population.
- **We must set high expectations for student outcomes and deeper learning, support meaningful data and assessment, and use appropriate accountability approaches to identify challenges and promote continual improvement.** These levers are essential for advancing education equity and outcomes, particularly for our most marginalized young people. But we need to redesign these systems and make them part of a broader, balanced agenda. This means expanding the array of knowledge and skills we seek to develop in young people, improving and broadening our measures and methods, and advancing approaches that center opportunity and capacity alongside outcomes.
- **We must make our education system function like a learning system.** If we are going to transform our education systems to align with what we know from research (which itself continually advances), and to help each and every child achieve their full potential, then we need education systems at all levels that are focused on continual learning and improvement. Sectors such as medicine that have developed structures and cultures to use data, evidence, experience, and judgment to fuel continual improvement have experienced ongoing progress and (periodically) breakthrough success. This learning engine is profoundly weak in our education system. We must strengthen our R&D infrastructure and build the structures and culture to fuel continual improvement in teaching and learning.

All of this calls for an array of near-term federal policy actions to both address current crises and as first steps toward a new national education agenda and building back better. Many of these early priorities

are already reflected in policy proposals released by the Biden-Harris campaign, and many enjoy wide support in the field. These actions would benefit all children, but they focus intentionally on serving children and youth who are most marginalized and least served by current systems – as has long been and remains the core federal role. These recommendations include further actions on COVID relief and recovery, early executive actions, and broader legislative proposals.

1. Ensure **equitable access to education resources** to create the context, conditions, and learning experiences that can help children thrive. This includes:
 - Providing significant funding in a COVID recovery package that is targeted to students most impacted by the pandemic and advances equity (including Title I, Title III, Title IV for out of school and summer learning, Education for Homeless Children, and IDEA), requires transparent reporting on per pupil funding (including actual teacher salaries), and prevents inequitable impacts of potential funding cuts through [Maintenance of Effort and Equity requirements](#);
 - Significantly increasing funding for core K-12 education programs, including Title I, Title II, Title III, Title IV, Education for Homeless Children, and IDEA in the proposed budget; and
 - Leveraging federal funds to advance more equitable state and local funding formulas, as in the Biden-Harris campaign proposal, such as through incentivizing weighted student funding formulas or other approaches.

2. Eliminate the **digital divide** to improve learning and strengthen relationships. This includes:
 - Providing significant funding for E-rate in COVID recovery funding and ensuring such funding provides home connectivity and devices for students in need, including year-round to support summer learning;
 - Providing guidance to states on using federal funds appropriately to deliver professional learning for educators to strengthen the quality of virtual learning, the effective use of technology for relationships and instruction, and promoting and providing digital literacy training for students and families; and
 - Providing funding or guidance on appropriate uses of federal funds to support community hubs and partnerships with other entities focused on connectivity and training (e.g., libraries, youth development organizations, etc.).

3. Increase **educator capacity, diversity, and support** to improve adult understanding and practice, and to support adult learning and well-being, including in COVID response and recovery. This includes:
 - Incentivizing teacher and leader preparation programs through Title II of the Higher Education Act to ensure their graduates understand the science of learning and development and have rich clinical experiences (including teacher residencies) to develop their skills and cultural competency in this regard;
 - Increasing funding for HBCUs, TCUs, MSIs, and other high-quality educator preparation programs that advance teacher and school leader diversity that better aligns with student populations (and support states in setting and achieving goals in that regard); and
 - Enhancing guidance and support for Title II of ESSA to establish ongoing systems of professional learning for teachers and school leaders that center the science of learning and development, promote continual improvement, and address issues including bias, culturally responsive teaching, development of relationships and belonging, meeting each child's needs and interests, and delivering multi-tiered systems of support; and

- Providing educators and non-classroom personnel with the supports they need for their well-being and efficacy, and with guidance on how to support positive learning environments.
4. Strengthen **early childhood education** in terms of access, quality, and systems integration to promote strong learning and development from the earliest years. This includes:
- Providing significant funding in COVID recovery to stabilize the child care sector and support early childhood education;
 - Significantly increasing funding for core early childhood programs to increase access and quality, including Child Care and Development Block Grant, Head Start and Early Head Start, Preschool Development Grants (PDG), the Maternal, Infant, and Early Childhood Home Visiting Program, Title I, and IDEA Parts B and C;
 - Providing guidance and establishing White House and/or interagency mechanisms for coordination (such as the “Children’s Cabinet” below) to support alignment across early learning settings and K-12, including addressing the full range of each child’s learning and development needs, collaborating on family partnerships, bridging key transitions, and promoting shared professional learning; and
 - Providing guidance on delivering comprehensive, early childhood services and supports, including through comprehensive screenings, effective transitions, and greater access and integration across home visiting, full-day and -year child care (including center based and family care), full-day pre-K, and kindergarten.
5. Strengthening pathways for **adolescent recovery and success** by creating an **adolescent promise agenda** that recognizes the unique challenges for adolescents created by COVID, the importance of identifying and re-engaging students who have become disengaged, and the need for an asset-based, comprehensive approach to policies that will support stable pathways from school to college, work, and adulthood. This includes:
- Convening a White House summit on adolescent promise that elevates the [findings from the science related to adolescent](#) assets and needs, explores the experience of adolescents in light of COVID, and identifies key components of a national adolescent promise agenda;
 - Providing funding and guidance in COVID recovery efforts to identify and reconnect, reengage, and redirect adolescents who have become disconnected from school and/or whose graduation and post-secondary plans were derailed because of COVID, specifically including funding for part-time and summer employment (such as national service, and employment as tutors and mentors) to provide financial support, agency, and productive engagement; and
 - Providing funding and guidance to enhance the integrated impact of programs (such as through the “Children’s Cabinet” below) focused on creating a variety of pathways to success for adolescents, including effective CTE approaches and those that connect programs at ED, Labor, Justice, HUD, HHS ACF, and other adolescent-serving agencies.
6. Increase support for **out-of-school learning time, community-based organizations, and family engagement** to accelerate COVID recovery, re-engage and support disconnected youth, and maximize learning and development across settings. This includes:

- Significantly increasing funding and providing guidance through Title IV, Title I, and CCDBG, to expand and improve afterschool and summer learning (including through community hubs) to provide opportunities to accelerate recovery and learning, targeted toward the most marginalized students;
 - Providing resources for balanced approaches to academic acceleration and social-emotional support, such as through high-dosage tutoring, mentoring, and student support coaches using evidence-based programs and mechanisms, including national service organizations;
 - Increasing the focus on parent and family engagement, such as through Title I funding and guidance on school parent and family engagement policies, and Statewide Family Engagement Centers, to identify and address the full array of child and family needs, help buffer the effects of adversity, and support learning and development at home; and
 - Providing funding and guidance to enhance strategic partnerships between schools and community-based organizations to work with children and families to identify and reconnect youth who have become disconnected from education and other systems of support, including through national service organizations.
7. Establish **comprehensive systems of supports** and promote **collaboration and integration of federal, state, local, and community programs** to most efficiently and effectively meet the full needs of each and every young person. This includes:
- Enhancing coordination and integration across federal programs, including by creating a position within the White House Domestic Policy Council and/or a White House Office on Children and Youth that would help lead and support an enhanced inter-agency council or Cabinet for Children and Youth, including at least the US Departments of Education, Labor, Health and Human Services, Agriculture, Justice, and the Corporation for National and Community Service, charged with applying the science of learning and development; aligning federal programs and funding streams; developing an integrated children and youth strategy and annual addendum to the President’s budget proposal; taking on cross-cutting issues to align and simplify federal programs, such as definitions, eligibility, goals, planning, measurement, and data collection; and supporting coordination at the state and local levels, such as through guidance that promotes effective and impactful blending and braiding of funding and supports.
 - Increasing investment through COVID recovery and core federal programs, such as Title I, and providing guidance to states and districts on how to build and enhance comprehensive systems of support, including mental health, physical health, and nutrition, such as through interagency partnerships, collaboration with community partners, blending and braiding funding, support for community schools; and other strategies;
 - Investing in school counselors and other adult capacity in school systems, and partnerships with adults and providers outside of schools, to help identify and integrate services to support each child, such as through student success coaches and expanded partnerships with national service; and
8. Transform **school culture, climate, safety, and discipline** to create learning environments designed for belonging, relationships, and success. This includes:
- Rescinding Executive Orders and other chilling actions that would bar federal agencies, contractors, or grantees from discussing and addressing systemic racism and diminish state and local efforts to advance culturally relevant curricula;

- Remedying disproportionate impact related to exclusionary discipline for students of color and students with disabilities, and moving away from punitive discipline policies, by updating and re-issuing prior civil rights guidance on school discipline policies (in K-12 and early childhood settings), improving data collection and use, and supporting schools and districts to build more science-informed systems that prevent overpolicing and advance restorative models;
 - Providing guidance and funding for measuring and improving school climate and student experience, including through Title I school improvement efforts and Title IV;
 - Issuing guidance to states and districts on how to support identity-safe and inclusive learning environments for students, including delivering culturally responsive curriculum, pedagogy, and assessments and addressing conscious and unconscious bias;
 - Restoring and advancing civil rights protections for LGBTQ students from discrimination under Title IX, and protecting all students from sexual assault and harassment under Title IX; and
 - Restoring and advancing guidance that supports legally sound efforts to advance racial integration, access, and diversity, in K-12 and higher education.
9. Support efforts to establish **more comprehensive, improved systems of assessment and broader measures of opportunity and achievement** to better measure and support student learning and development, with a focus on equity. This includes:
- Establishing a national commission to explore and provide recommendations on “what we measure, how we measure it, and what we can best do with that information” to better understand each child’s learning and development and to support ongoing improvement in opportunity and outcomes, particularly with regard to better supporting marginalized children and youth, including consideration of [the recommendations of the National Academy of Sciences regarding educational equity indicators](#);
 - Supporting states and districts to develop fuller systems of assessment designed to support deeper learning that include an array of culturally competent, integrated assessments that measure and advance whole child learning and development, including formative, interim, diagnostic, performance/ project-based assessments, and more; and
 - Providing guidance on eliminating policies that promote tracking of students and other decisions based solely on test scores.
10. Enhance the federal **education R&D infrastructure** and invest in state and local R&D capacity to support a culture of continual improvement toward creating systems that are aligned with the science and designed for equity. This includes:
- Significantly increasing investment and strengthening the ED R&D infrastructure, including the Institute of Education Sciences (IES) and research-practice partnerships, such as through the Education Sciences Reform Act (ESRA) reauthorization, and increasing state funding and capacity in this regard;
 - Reorienting IES toward more rapid cycle, problem-solving, equity focused research, with disaggregation of data and results, and developing standards and expectations for more authentic, participant-driven research projects and methods that are developed and executed in partnership with educators, students, and communities, particularly including low income communities and communities of color;
 - Significantly increasing investment in the Education Innovation and Research Grants;
 - Ensuring sufficient staffing at IES and formalizing partnerships between IES and other key federal research agencies, such as the National Science Foundation;

- Increasing funding for updating data-systems and reporting to ensure data is accurate, actionable, timely, private, and secure, including providing for early warning data and real-time data on student progress *and* opportunity to learn, and developing data systems that integrate data across multiple systems to provide a fuller picture of student needs and services;
- Increasing research, translation, and dissemination related to the science of learning and development, such as through IES and its centers, to continually inform practice and policy; and
- Anchoring ED implementation of ESSA and other key laws in continual improvement, including with regard to guidance, monitoring, and evaluation.

Finally, many organizations have developed detailed proposals that are aligned, in whole or part, with the science of learning and development, and the SoLD Alliance seeks to amplify these efforts. For example, the recently released framework from the Learning Policy Institute (a SoLD Alliance Governing Partner) titled, *Restarting and Reinventing School: Learning in the Time of COVID and Beyond*, the Aspen Institute's report, *Recovery and Renewal: Principles for Advancing Public Education Post-Crisis*, and the BELE Network's *Building Equitable Learning Environments (BELE) Framework to Restore our Collective Future*.

The SoLD Alliance is a growing network of leading researchers, practitioners, advocates, and policymakers who are working together because we see that the science of learning and development holds powerful, positive, unifying lessons for how we can advance equitable opportunity and outcomes for all young people, particularly those least served by the current systems. Governing partners of the SoLD Alliance include Pamela Cantor and Brigid Ahern (Turnaround for Children), Linda Darling Hammond (Learning Policy Institute), David Osher (American Institutes for Research), Bethany Little and Scott Palmer (EducationCounsel), Karen Pittman and Merita Irby (Forum for Youth Investment), and Todd Rose (Populace). To learn more about partners and Allies of the SoLD Alliance, visit <https://www.soldalliance.org/advisory-committee>.

Thank you again for your service and consideration of these recommendations as you support transition to the Biden Administration. If you would like to discuss these ideas, please feel free to contact Jamie Fasteau at Jamie.Fasteau@educationcounsel.com, Samantha Kobbah at Samantha.Kobbah@educationcounsel.com, Bethany Little at Bethany.Little@educationcounsel.com or Scott Palmer at Scott.Palmer@educationcounsel.com, who would be happy to answer any questions or facilitate your engagement with the SoLD Alliance and aligned leaders in the field.